

ABSTRACT OF THE DISCLOSURE

In a multiple access control system with intelligent bandwidth allocation for wireless ATM networks, an intelligent bandwidth allocator is provided for statically allocating reservation type bandwidth and 5 dynamically allocating contention type bandwidth to the mobile terminal. A traffic estimator/predicator is provided for predicting the CNF value of a subsequent frame by the CNF value of at least one frame, and determining the number of the SCR slots and ABR slots to be allocated.

A multiple access controller is used for providing the reservation type 10 bandwidth with a multiple access function in a reservation access manner, and providing the contention type bandwidth with a multiple access function in a contention access manner.